

Fig. 1A

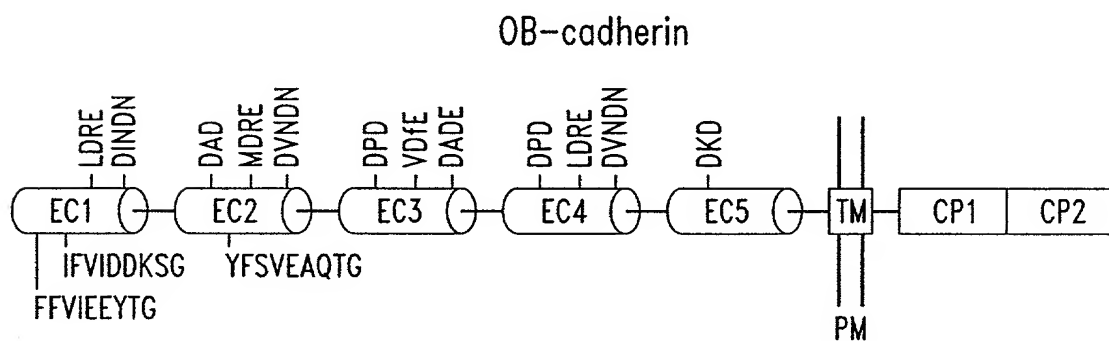


Fig. 1B

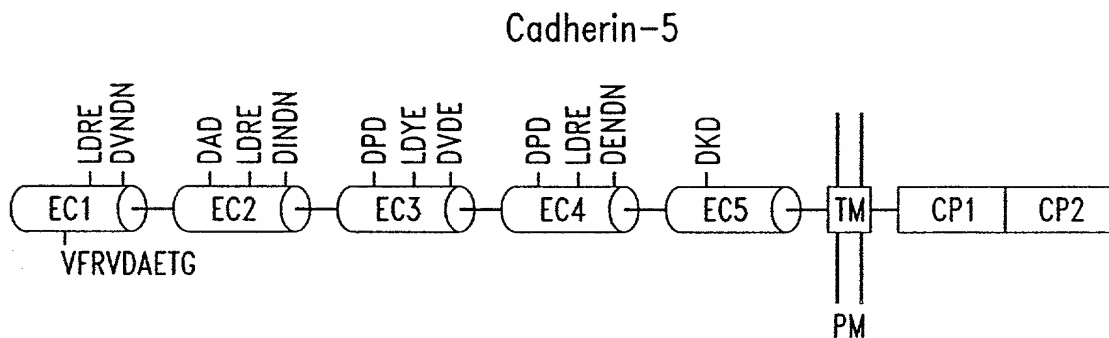


Fig. 1C

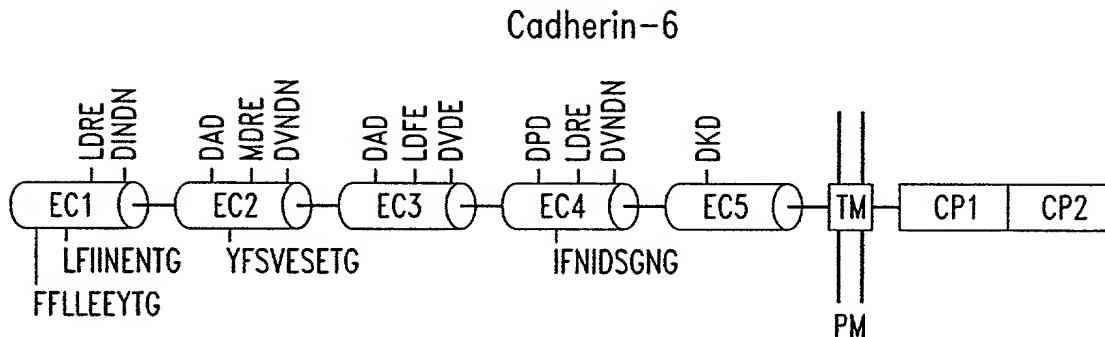


Fig. 1D

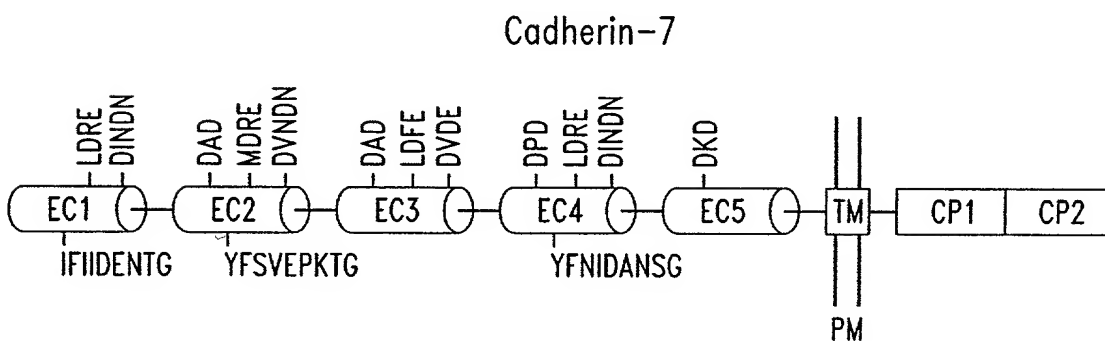


Fig. 1E

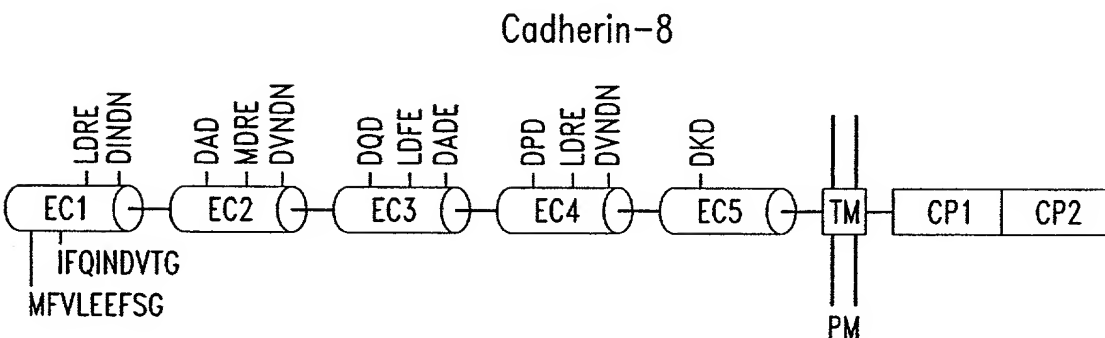


Fig. 1F

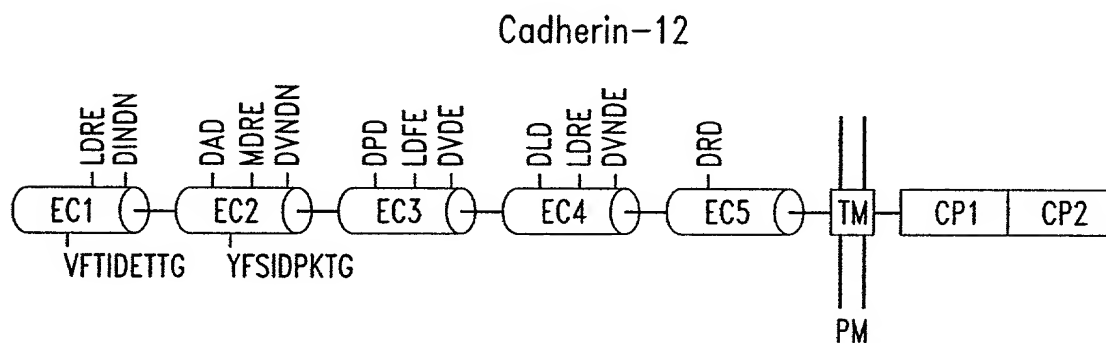


Fig. 1G

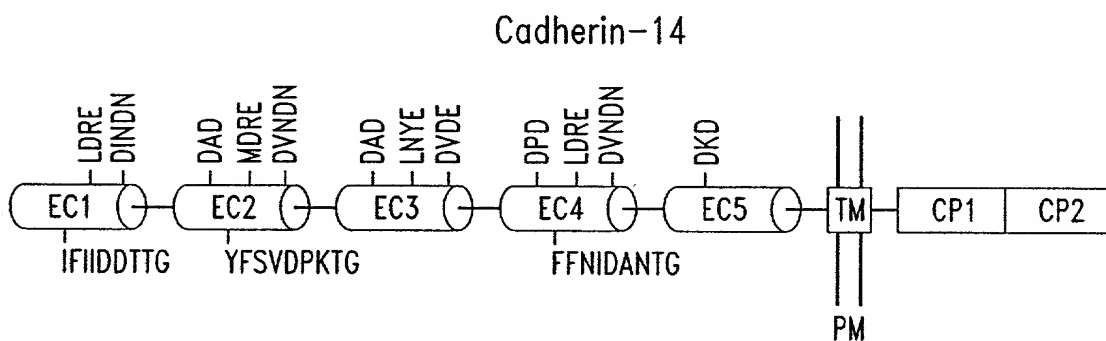


Fig. 1H

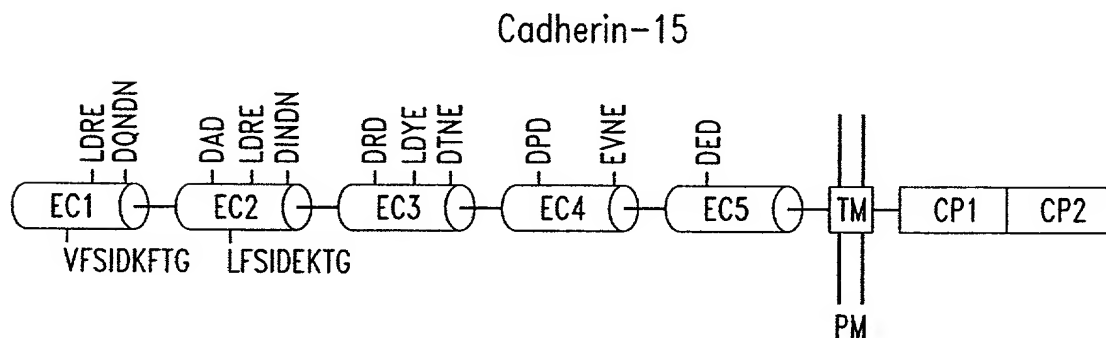


Fig. 1I

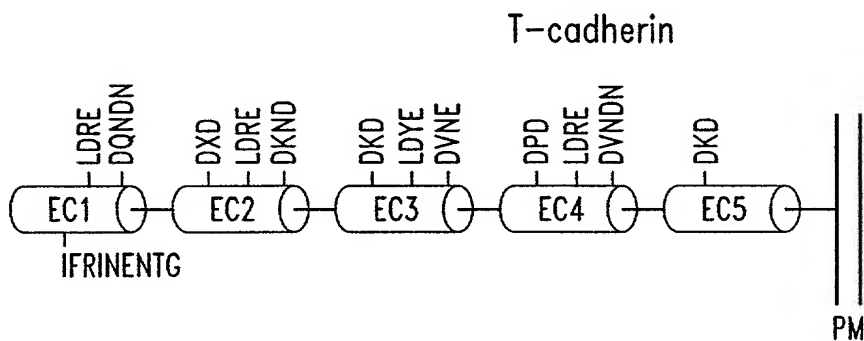


Fig. 1J

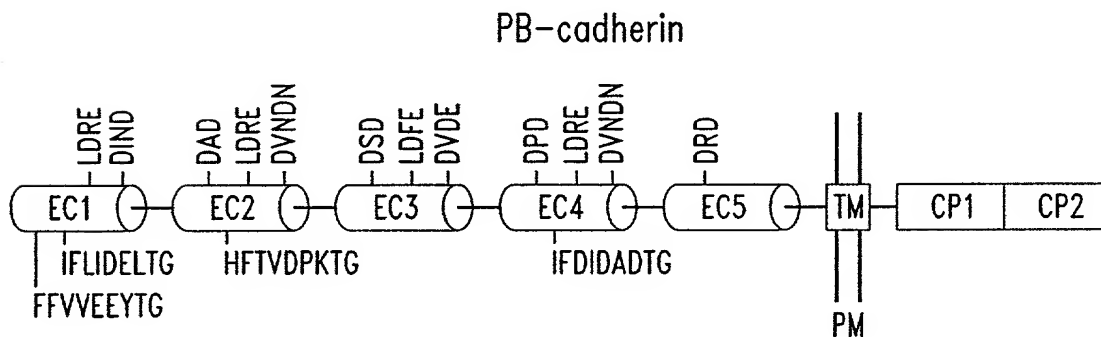


Fig. 1K

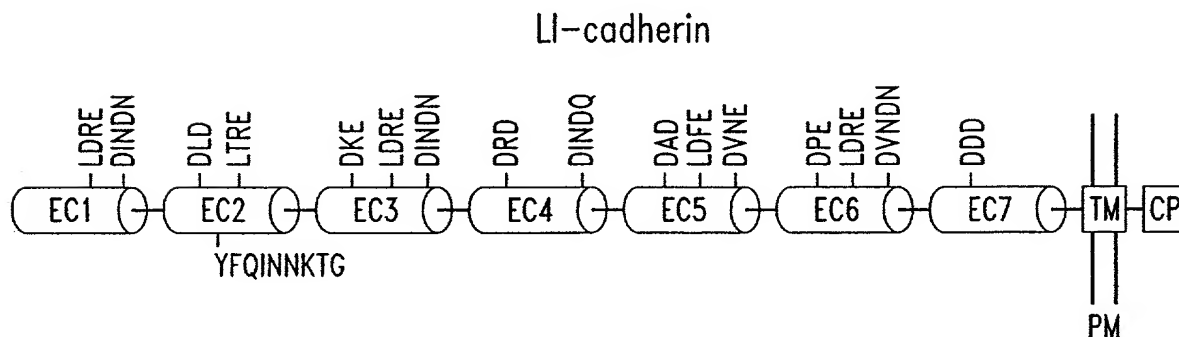


Fig. 1L

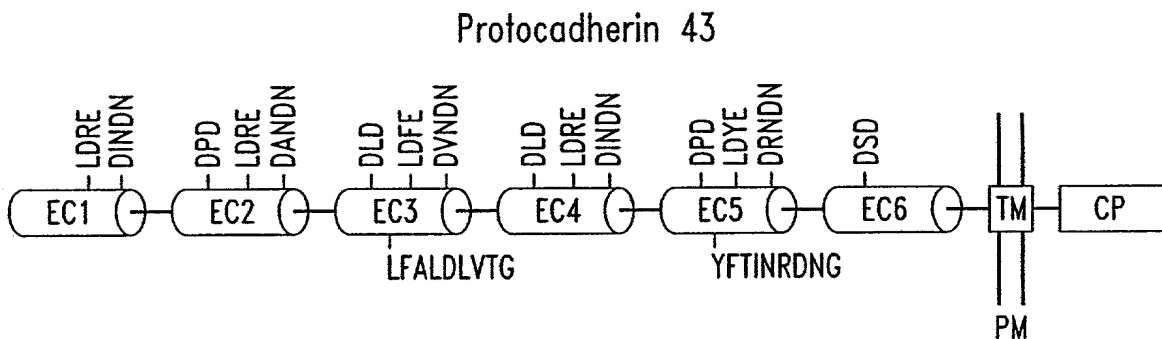


Fig. 1M

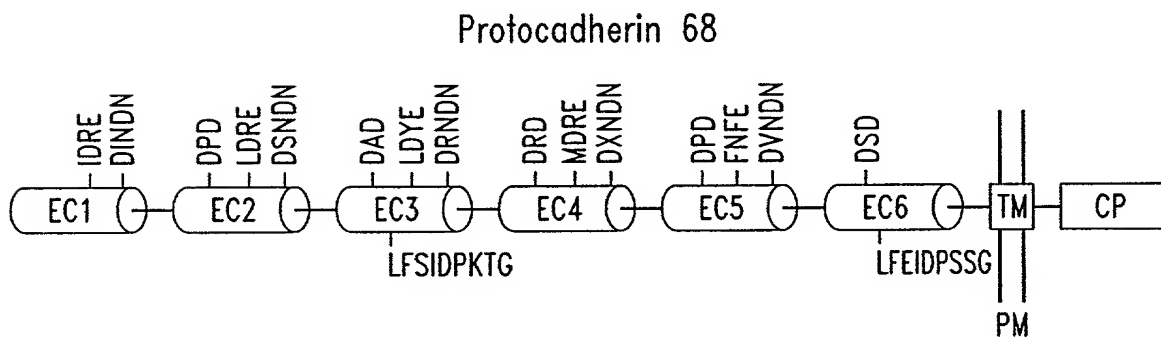


Fig. 1N

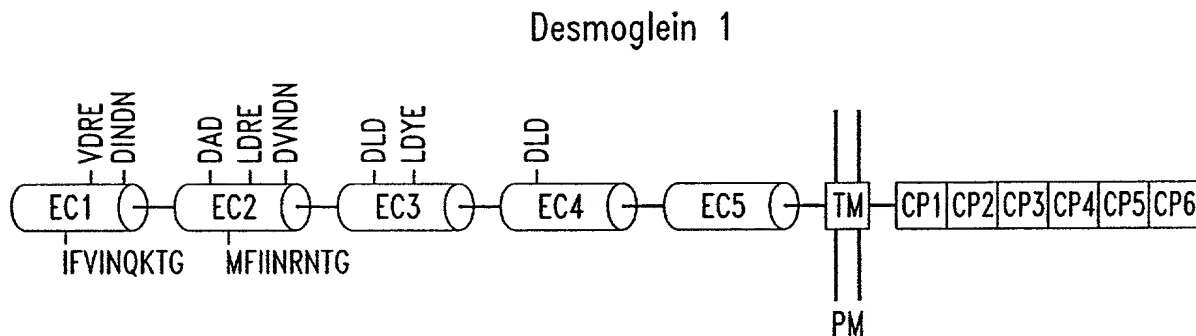


Fig. 10

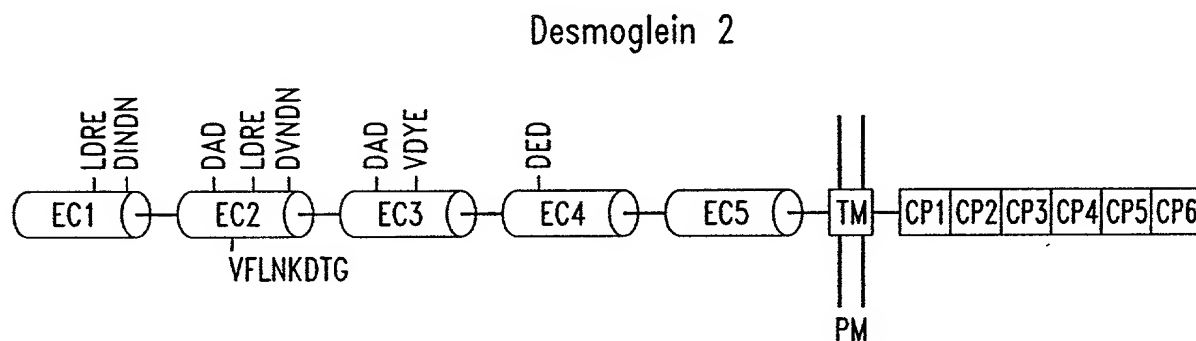


Fig. 1P

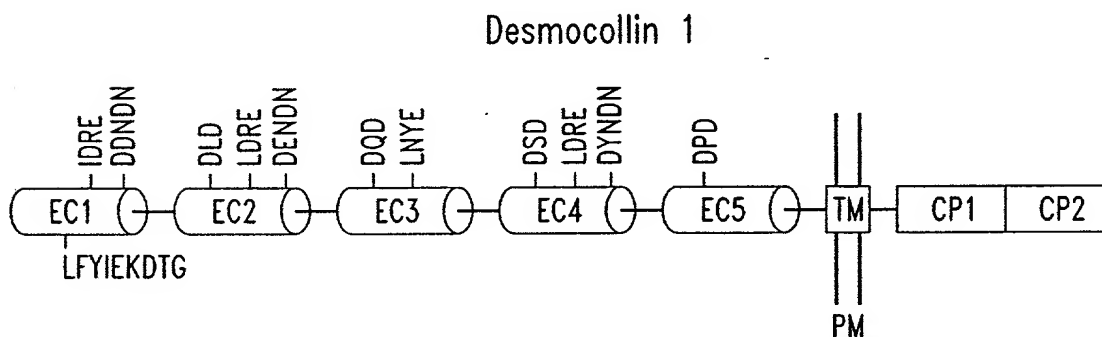


Fig. 1Q

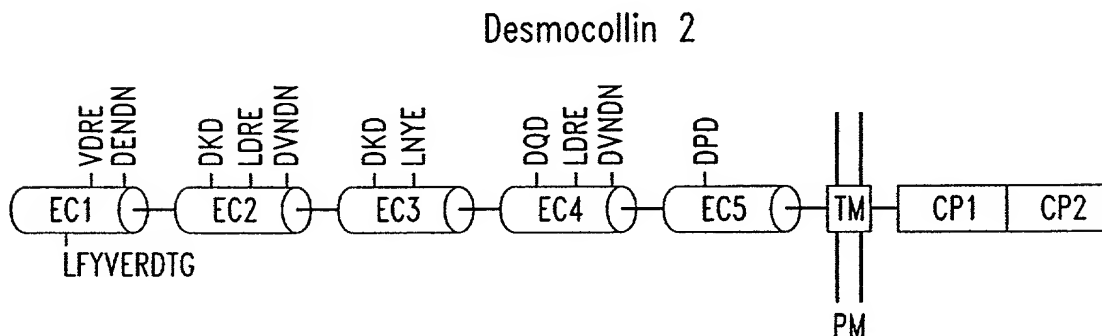


Fig. 1R

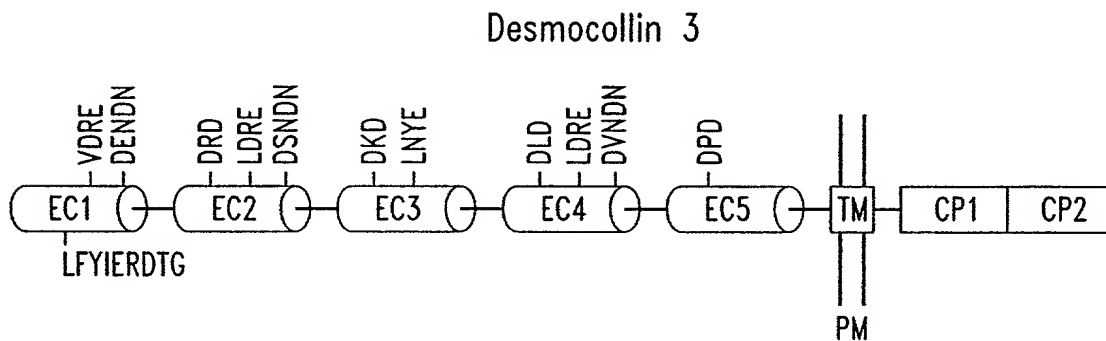


Fig. 1S

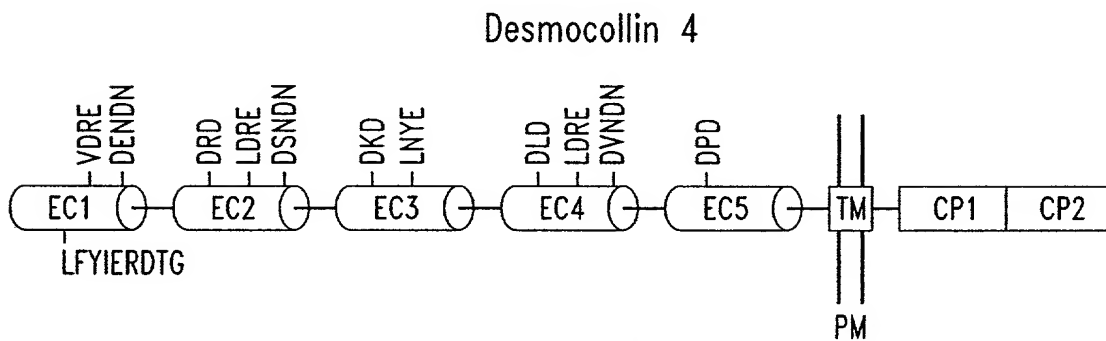


Fig. 1T

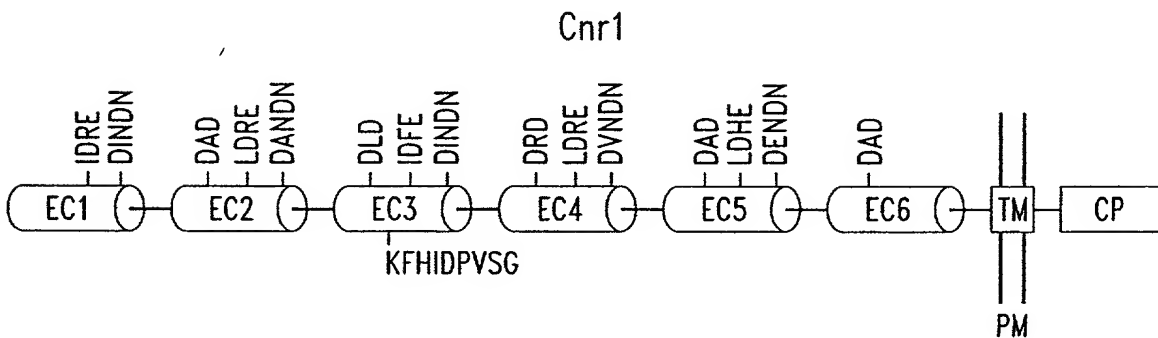


Fig. 1U

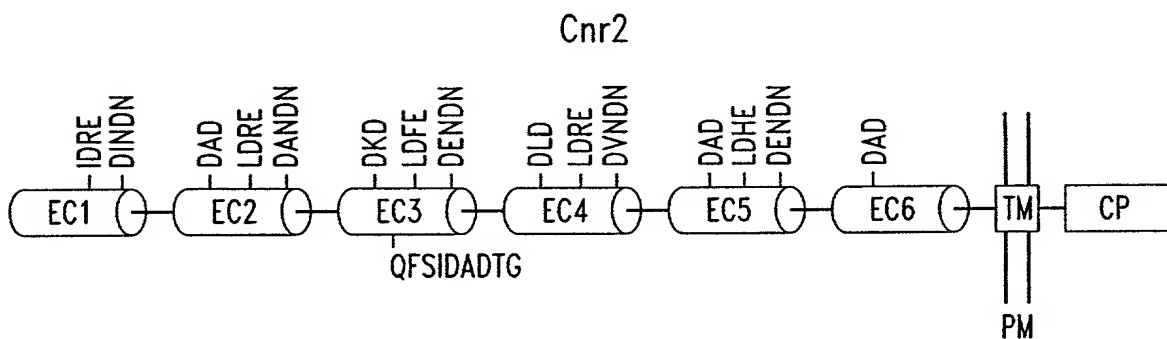


Fig. 1V

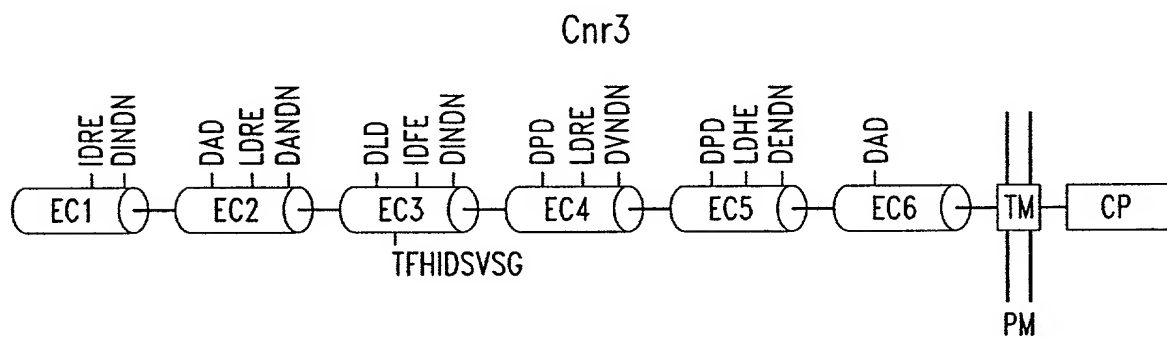


Fig. 1W

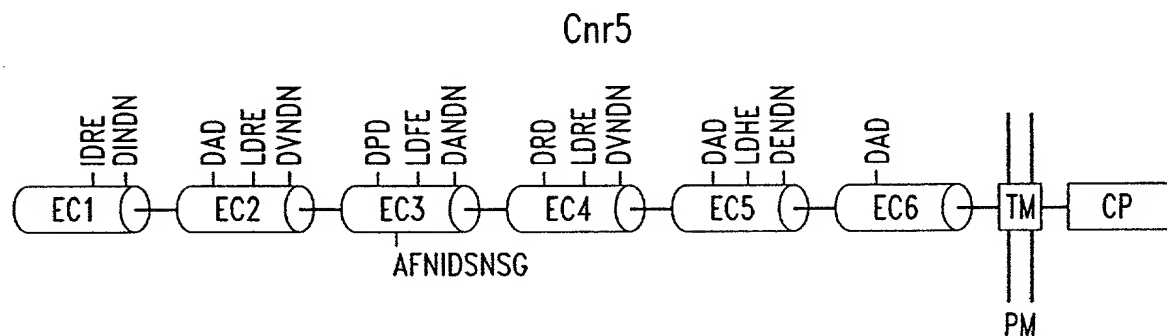


Fig. 1X

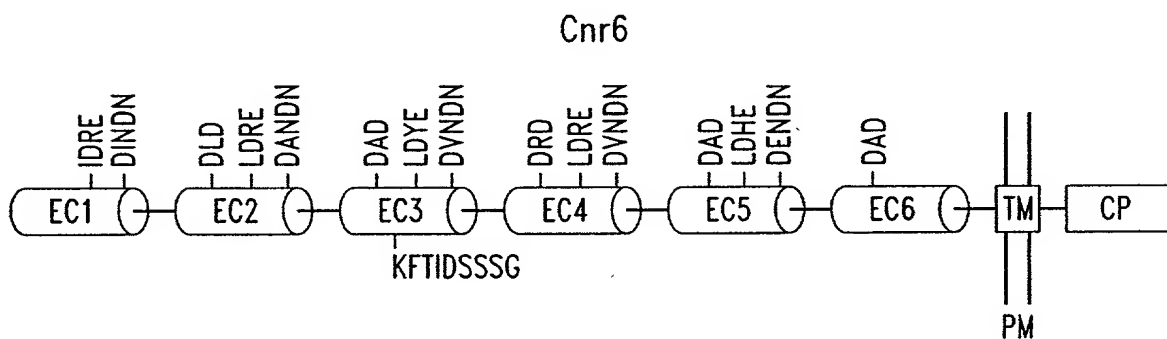


Fig. 1Y

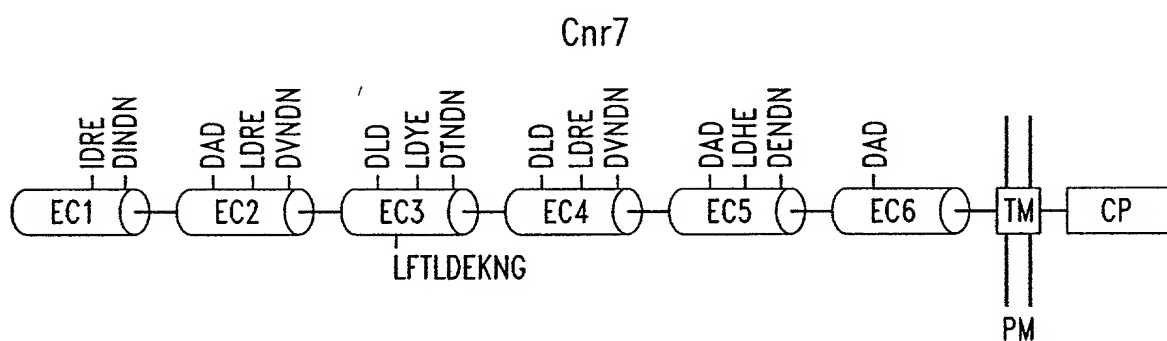


Fig. 1Z

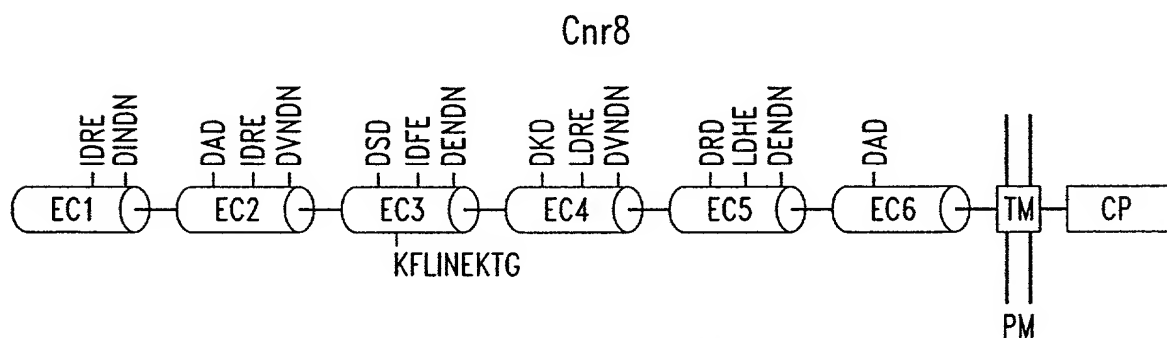


Fig. 1AA

Sheet 6 of 6

Obcad	EC1	RSKRGWVWQFFVIEETGDPVVLVGRLHSDIDSQD---GNIKYILSGEGAG---TIFVIDKSGNI-HATKTLDRERAQ---YTLMAQAVDROT---NRPLEPSEFIVKIQDINDNPPRF
Obcad	EC2	----LHETHANVPERS-NVGTSVIQVTSADDDPTYGNSAKLVSYILEGQD---YFSVEAQGTGIRIALPNWDREAKEE---YHVVIOAKDMGG-HMGLSGTTKVITITLTDVNDNPPKF
Cad5	EC1	RQKRDWINQMHIDEKNTSLPHVVGKIKSSVSRKN---AKYLLKGEYVG---KVRVDAETGVV-FAIERLDRENISE---YHLTAVIVDKOTG---ENLETPSSFTIKVHDVNDNPPVF
Cad6	EC1	RSKRSWVWQFFLEETGSDYQVVGKLSHSDQDRGD---GSLKYILSGDGAG---DLFIINENTGDI-QATKRLDREKPV---YTLRAQAQINRRT---GRPVEPESEFIIKHIDINDNEPIF
Cad6	EC2	----TKEYVATVPENS-DVGTFWQVITADDDPTYGNSAKVWYSILQGP---YFSVESETGIKIALINWDREIREQ---YQVVIQAKDMGG-QMGLSGTTVNIITLTDVNDNPPRF
Cad6	EC4	----SKLAYILOIREDA-QINTTIGSVTAQDPDAAR---NPVKYSVDRHTMD---RIFNIDSGNSI-FTSKLLDRETLN---HNITVIAEINN---PKQSSRVPLVYKVLWDVNDNAPEF
Cad7	EC1	RTKRSWVWQFFVLEEMGSDPLYGKLSHSDVXGD---GSIKYILSGEGAS---SIFIIDENTGDI-HATKRLDREKPV---YTLRAQAQHDRLT---NKPVPESEFVIKIQDINDNEPKF
Cad7	EC2	----LDGPTYTAGVPENS-PVGTSVVQVITADDDPTYGNSARVWYSILQGP---YFSVEPKTGIIKTALPNWDREAKQ---YLLVIOAKDMVG-QNGGLSGTTSVTITLTDVNDNPPRF
Cad7	EC4	----TSRLYSWVSEAA-KVGTIIGTVAABHDPDASN---SPVRYSIDRNTDLE---RYFNIDANSVI-TTAKSLDRETNV---HNITVLAVESQN---PAQIGRGYVAITITLINDNAPEF
Cad8	EC1	RSKRGWVWQFFVLEESFSGPEPILVGRLHTDLDPGS---KKIKYILSGDGAG---TIFQINDVTGDI-HAIAKRLDREKAE---YTLTAQAVDMET---SKPLEPSEFIIKIQDINDNAPEF
Cad12	EC1	RVKRGWVWQFFVLEEVGSEPVVVGKLSHSDLDKE---GTVKYILTSGDGAG---TVFTIDETGDI-HAIAKRLDREKPF---YTLRAQAQVDIET---RKPLEPESEFIIKIQDINDNEPKF
Cad12	EC2	----LDGPVYATVPENS-PVGAYVLQVATDADDDPTYGNSARVWYSILQGP---YFSIDPKTGIVIRIALPNWDREIVEQ---YQVLIOAKDMGG-QLGGLAGTTVNIITLTDVNDNPPRF
Cad14	EC1	RPKRGWVWQFFVLEEHMGDPQVVGKLSHNSDKGD---GSVKYILTGEAG---TIFIIDDTGDI-HSTKSLDREKTH---YVLHAQAIDRR---NKPLEPESEFIIKIQDINDNAPEF
Cad14	EC2	----TDGPYIVTVPENS-DMGTSVLQVATDADDDPTYGNSARVWYSILQGP---YFSVDPKGTGIVIRIALHNDREAREH---YSVWIOAKDMAG-QVGGLSGTTVNIITLTDVNDNPPRF
Cad14	EC4	----SMPSYLMVEYENA-KIGTVVGTVLAQDPDSTN---SLVRVFINVVEDD---RFFNIDANTGTIRT-TKVLDRREETPW---YNTVTASEIDN---PDLLSHVTGVRVLDVNDNPPEL
Cad15	EC1	----RVRRANWIPPIVSENHKLPLVPLVQIKSDKQK---LGSVYISIQGPGVDEEPRGVFSIDKTKGV-FLNMLDREKTRD---FRLRAFALDLGG---STLEDPTDLEIWWVDQNDNPPAF
Cad15	EC2	----LQEAFTGRVLEGA-VPGTYVYTRAEATDADDPEDNAALRFSILQGSPE---LFSIDELTGEIRTVQVGLDREVAV---YMLTLQVA-D---MSGDGLTATASAITLDDINDNAPEF
Tcad	EC1	-RQKRSIVVSPILIPENQROPFRDVGKVDSDRPSKFRLTGKGVQDEPKG---IFRINENTGSV-SVTRILDREVIAT---YQLFVETTDVNG---KTEGVPVLEVIQDINDNRRPIF
P8cad	EC1	RVKRGWVWQFFVWEETGTEPLYVGKLSHSDSEGD---GTIKYILSGEGAG---TIFLIDELTGDJ-HATERLDREKTF---YTLRAQAQDRAT---NRLLEPESEFIIKIQDINDSEPRF
P8cad	EC2	----LHGPYIGSVAELS-PTGTSVMQWMSADDDPTYGSSARLVYSVLDGEH---HFTVDPKGTGIVRTAVPDLDRSQER---YEVWIOATDMAG-QLGGLSGTTVTVVTDVNDNPPRF
P8cad	EC4	----RPPSGLLEVQEDA-QVGSVGVVTAQDPDAAN---RPVRYAIDRSDLE---QIFDIDADTGAI-VTGKGLDRETAGW---HNITVLAWEADN---HAQLSPASLRIRILDVNDNPPEL
L1cad	EC2	----LQSKYEGSVIRONS-RPGKPFLVYNATLDDPATPNGLYYQIVTQLPMINWVYQINNKGTGAI---SLTREGSQELNPAKNPVLVTSVKDMGGQSENSFSOTTSVDIIVTENTWAKAPAP
Pcd43	EC3	----NQSLYRARVPGGC-TSGTRVWQVLAIDLDEGP---NGEIIYSFGSHNRAGVR-QLFALDLVTGML-TIKGRDLFEDTKL---HEIYIOAKDKGA---NPEGAHCKVLVEVWVDVNDNAPEI

Fig. 2A

Patent # 6,330,001

Pcd43	EC5	-----SQSSYDVYIEENW-LPGAPILNLVNDPDPQON-ARLSFFLLEQGAETGLVGRVFTINRNGIV-SSLVPLDYEDRE-----FELTAHSDGGT-----PVLATNISWIFVTRNDNAPQV
Pcd68	EC3	-----EAPSYLVELPENT-PLGTWIDLNATDADEGP-----NGEVLVSFSSYVPDRVR-ELFSDIPKTLI-RVKGNLDVEENGW-----LETQVQARDLGP-----NLIPAHCKVTVKLIIDRNDNAPSI
Pcd68	EC6	VLPTLQNDTAELOVRNAGLGYLVSTVRALDSDFGE-----SGRLTYEIVDGNDD-----HLFEIDPSSGEI-RTLHPFWEDVTPV-----VELWKVTDHGKPT-----
Dsg1	EC1	ROKREWIKFAAACREGEDNSKRNPIAKIHSDCAAN-----QQVYTRISGVGIDPPYGVFVINOQTGEI-NITSIVDREVTF-----FIYCRALNSWG-----QDLERPLELRVRVLDINDNPPVF
Dsg1	EC2	-----SWATFAQIIEENS-NANTLVMTLNATDADEPNLNSKIAFKIRQEPSDP-----MFIINRNTGEIRTMNINFLDREYQG-----YALAVRSDRDG-GADGMSAECECNIKILDVNDNLPYM
Dsg2	EC2	-----TQDVFGSVFELS-AAHTLVKINATDADEPNTLNSKISYRIVSLEPAYPP-----VFYLNKOTGEIYTTSVTLDREHSS-----YTLTVEARDNGEVTDKPVKQAOQVIRILDVNDNTPWV
Dsc1	EC1	-----RWAPIASLMENSLGPPFQHVQOIQSDAQN-----YTIIFYSISGPGVDKEPFLNYIEKOTGDI-FCTRSIDREKYEQ-----FALYGYATTADG--YAPEYPLP-LIIKIEDDNDNAPY
Dsc2	EC1	-----RWAPIPCSMLENSLGPPFLFQQVQSDTAQN-----YTIYYSIRGPGVDQEPNLFYVERDTGNL-YCTRPVDREQYES-----FEIIAFATTPDG--YTPELPLP-LIIKIEDDNDNYPPI
Dsc3	EC1	-----RWAPIPCSMQENSLGPPFLFQQVESDAQN-----YTVFYISGRGVDKPELNLFYIERDTGNL-FCTRPVDREYDV-----FDLIAVASTADG--YSADLPLP-LPIRVEDENDNHPV
Dsc4	EC1	-----RWAPIPCSMQENSLGPPFLFQQVESDAQN-----YTVFYISGRGVDKPELNLFYIERDTGNL-FCTRPVDREYDV-----FDLIAVASTADG--YSADLPLP-LPIRVEDENDNHPV
Cnr1	EC3	-----DRSLYTVIKLPENV-PNGTLWKVWASDLDEGV-----NGDIMVSFSDISPNWK-YKFHIDPVSGEI-IVKGYIDFEECKS-----YEILIEGIDKQG--LPLSGHCKVTVQVEDINDNVPKL
Cnr2	EC3	-----QHPEYEVRIEENS-DNGTTVIRLNASDKDEGT-----NSAISYSFNRVLPKTL-EQFSIDADTGEI-ITQGNLDFEQVDV-----YKTHVDATDKGH-----PPMWGHCTVLVKVLDENDNVPQI
Cnr3	EC3	-----DRAIYRIVKLVENA-RNGTWWIRLNASDLDEGS-----NGQILYSFAADVSPKTE-ATFHIDSVSGEI-KVNGKIDFEETNL-----WKIQAEAVDKGS-----PPMFGHCTLLIEVLDINDNAPKI
Cnr5	EC3	-----DRFVYKVKVLEDA-LNGTLVINLNATDPDEGI-----NGDIIFYFRRPVSPAUV-HAFNIDSNSEV-RTKGLLDFFEEIKL-----YEIPVEAVDKGN-----IPMTGHCTLLVELLDVNDNAPEV
Cnr6	EC3	-----DKSIYWRLLENT-PNGTLVIKLNASDADEGI-----NKEILYFFSNLVLDVVK-SKFTDSSSGEI-KVKGELDYEDCKV-----YEINIDAVDRSA-----FPLAGHCKIIVKLVNDVNDNVPKM
Cnr7	EC3	-----DHLEYKVRIMENA-AKETLVITLNATDLDEGA-----NGQLVYSLMS-IKPTGRH-LFTLDEKINGEL-RWNGTLDYEENKL-----YEIEVLATDKGT-----PPMWGHCVLVEILDNDNSPEV
Cnr8	EC3	-----DRSVYEVKMYENQ-ENKTLVINLNATDSDEGI-----NKEVEYSSSLASSIIR- <u>QKFLINEKTGEI</u> -----YEIHVDATDKGY-----PPMVAHCTVLVEILDENDNAPEI

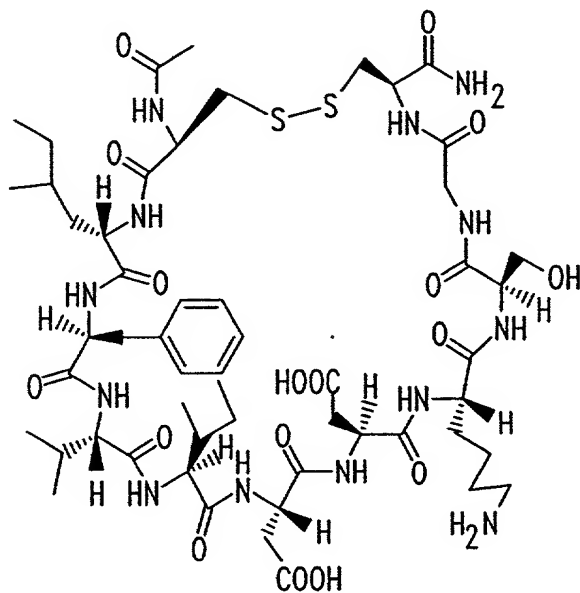
Fig. 2B

Human GWVWNQFFVIEEYTGPDPLVGR LHSDIDSGDGNIKYILSGEGAG
Mouse GWVWNQFFVIEEYTGPDPLVGR LHSDIDSGDGNIKYILSGEGAG

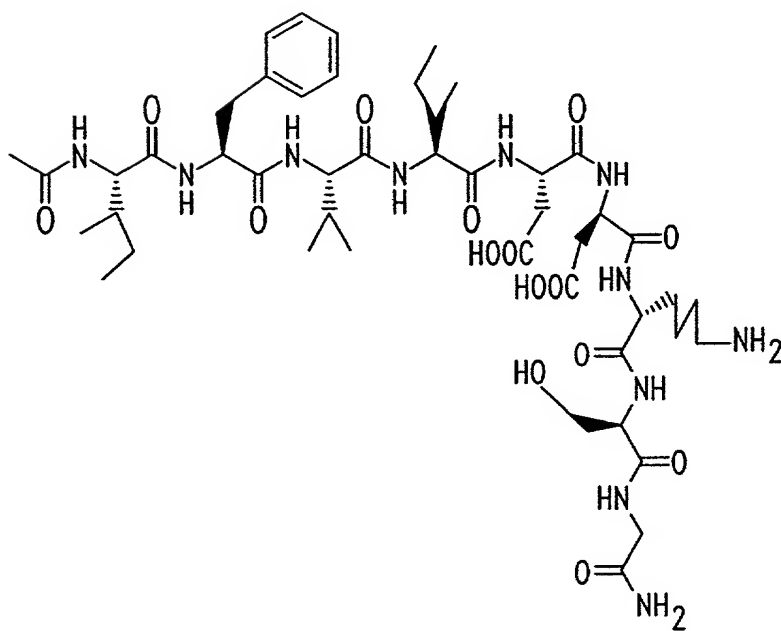
Human TIFVIDDKSGNIHATKTL DREERAQYTLMAQAVDRDTNRPLEPPS
Mouse TIFVIDDKSGNIHATKTL DREERAQYTLMAQAVDRDTNRPLEPPS

Human EFIVKVQDINDNPPEF
Mouse EFIVKVQDINDNPPEF

Fig. 3



N-Ac-CIFVIDDKSGC-NH₂



N-Ac-IFVIDDKSG-NH₂

Fig. 4A

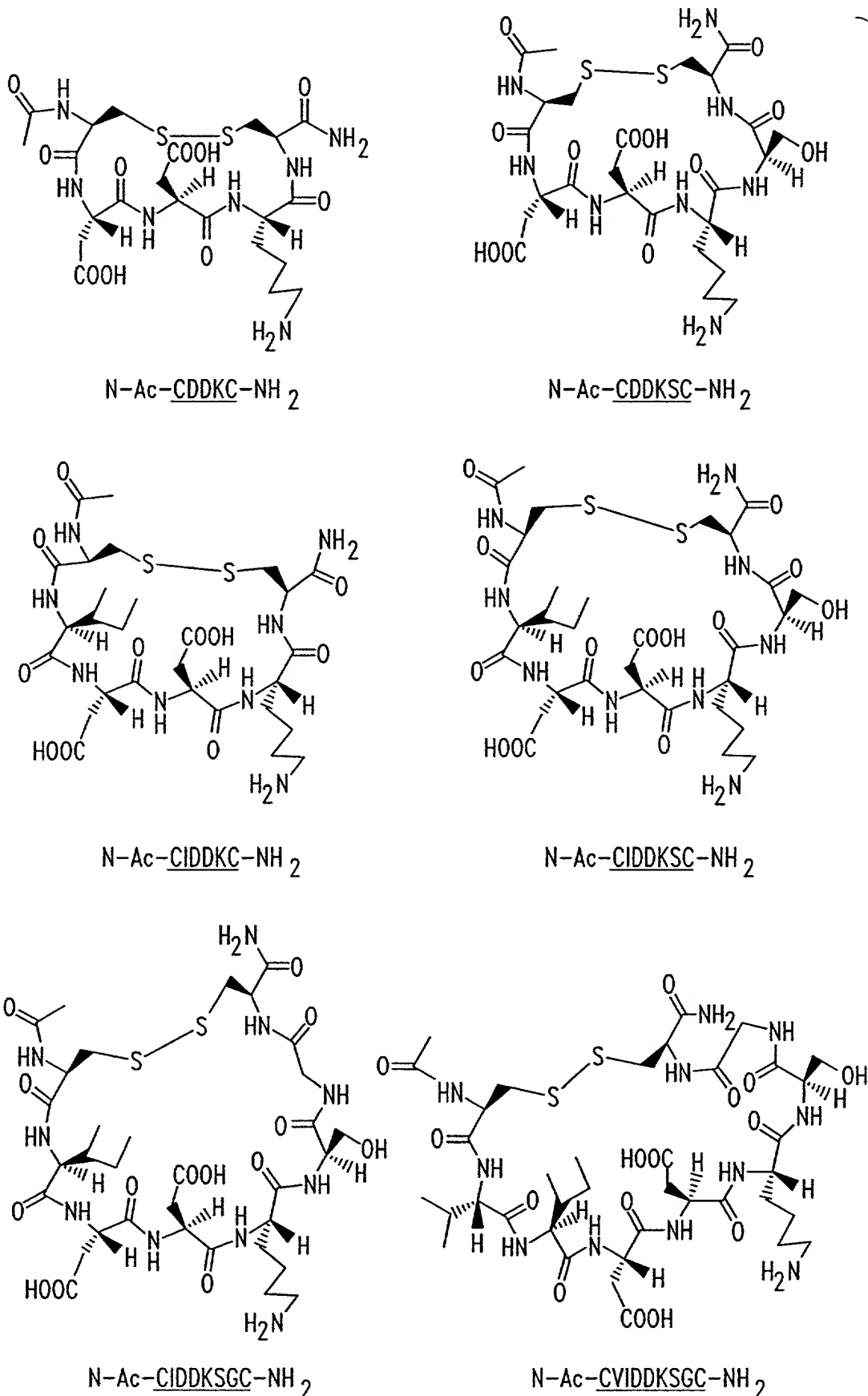


Fig. 4B

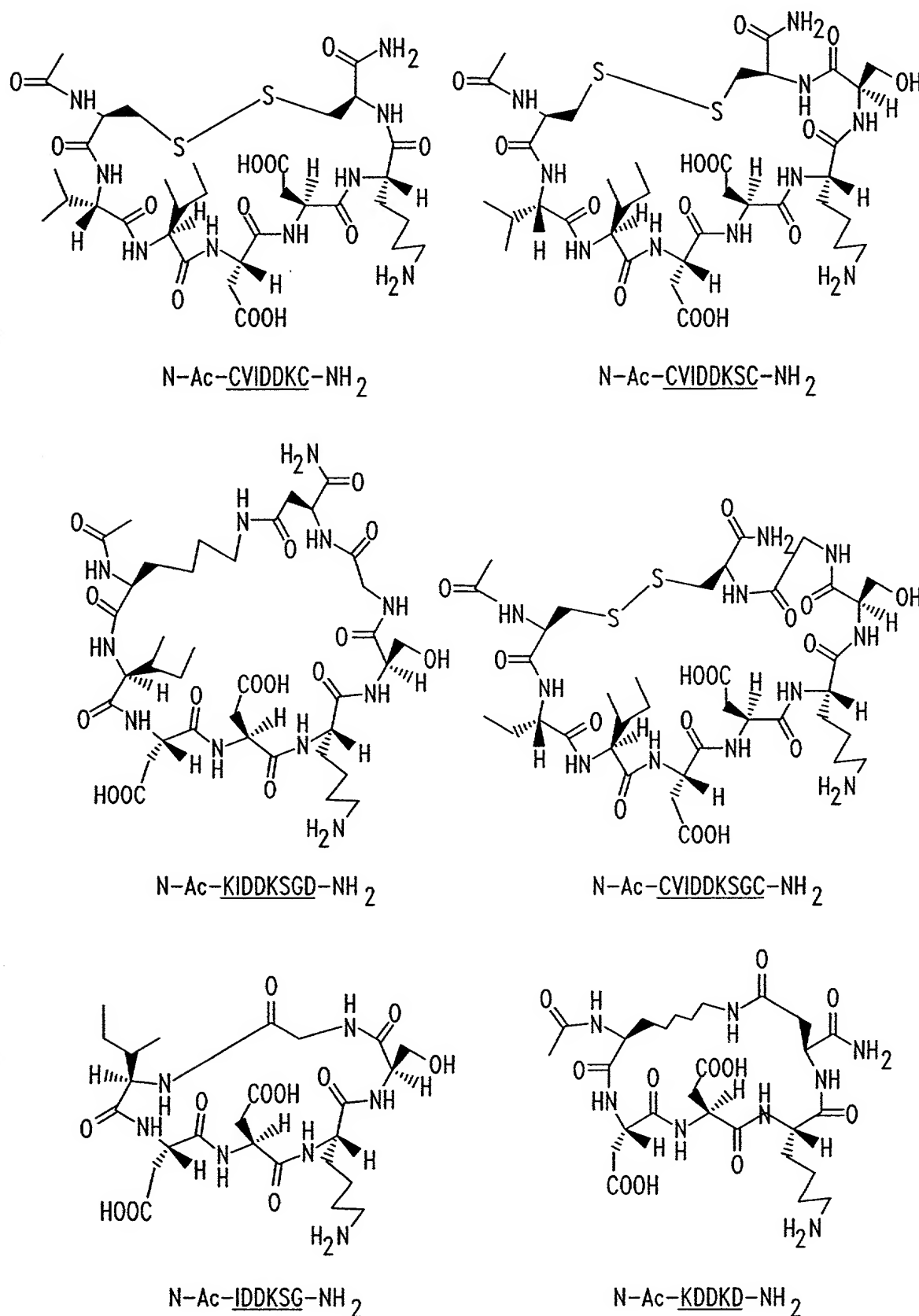


Fig. 4C

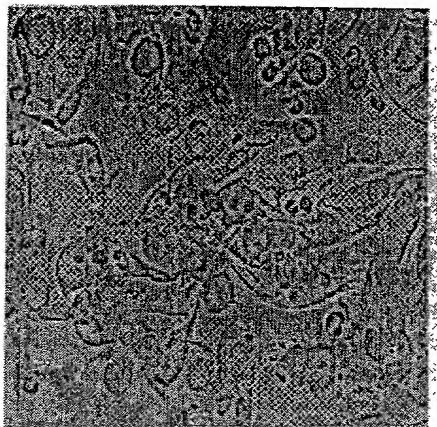


Fig. 5A

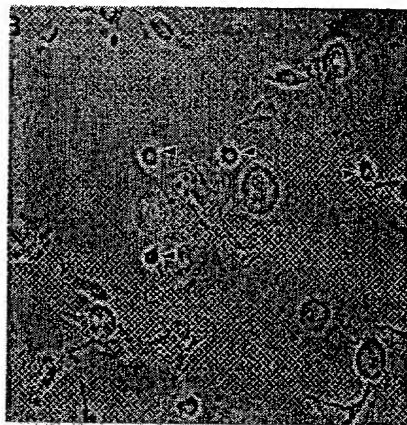


Fig. 5B

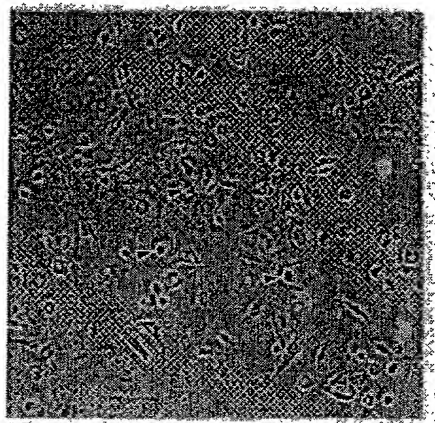
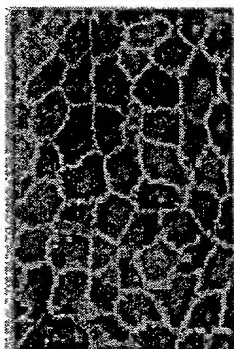


Fig. 5C



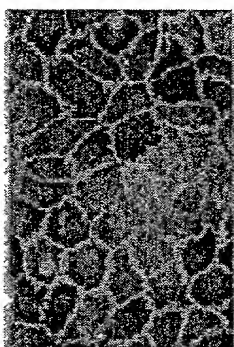
Control

Fig. 6A



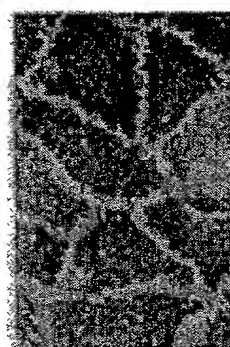
Control

Fig. 6B



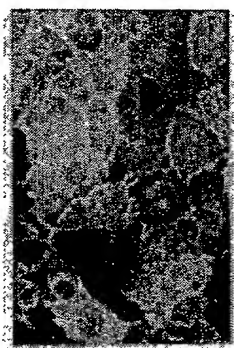
H-VFRVDAETGD-OH

Fig. 6C



H-VFRVDAETGD-OH

Fig. 6D



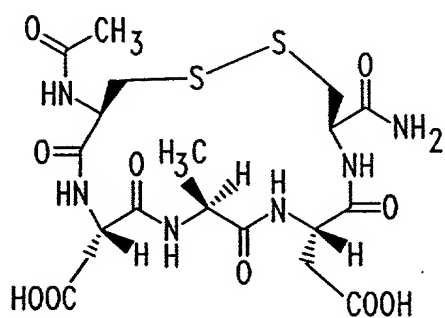
N-Ac-VFRVDAETGD-NH₂

Fig. 6E

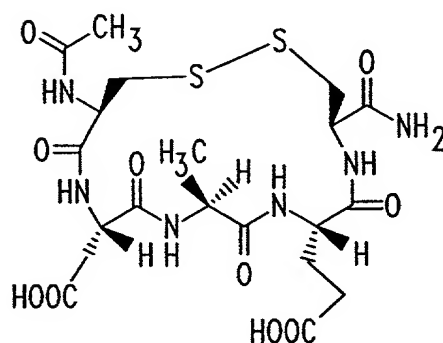


N-Ac-VFRVDAETGD-NH₂

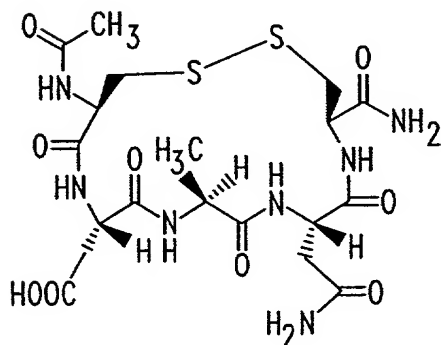
Fig. 6F



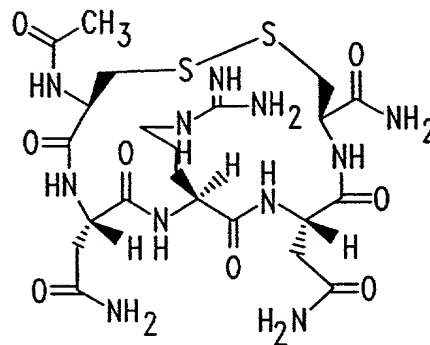
N-Ac-CDADC-NH₂



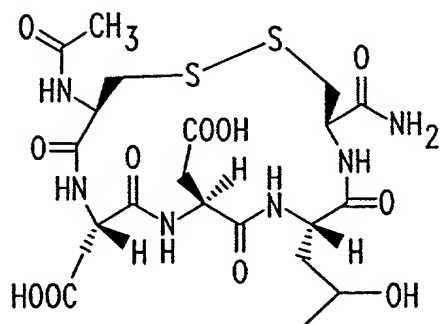
N-Ac-CDAEC-NH₂



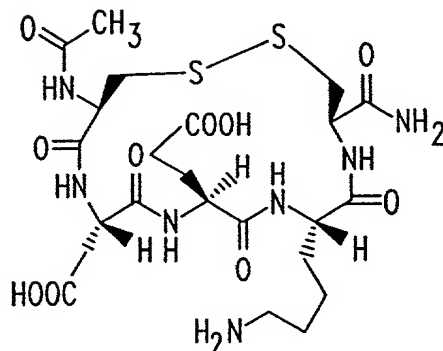
N-Ac-CDANC-NH₂



N-Ac-CNRNC-NH₂

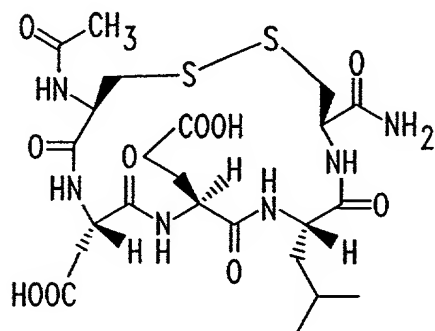


N-Ac-CDDTC-NH₂

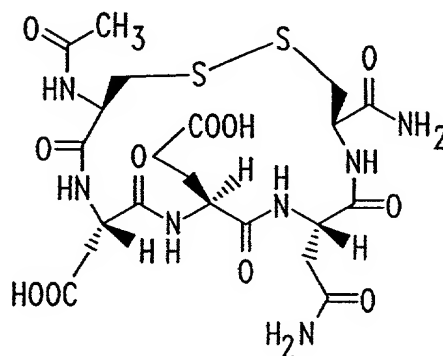


N-Ac-CDEKC-NH₂

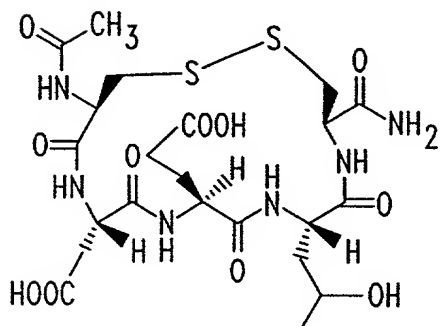
Fig. 7A



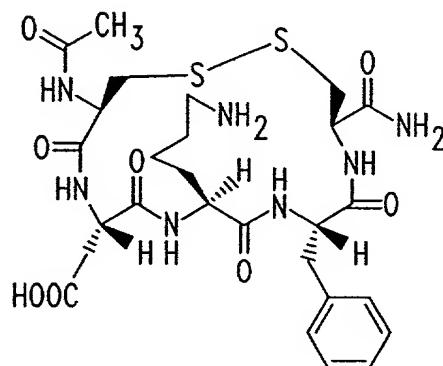
N-Ac-CDELC-NH₂



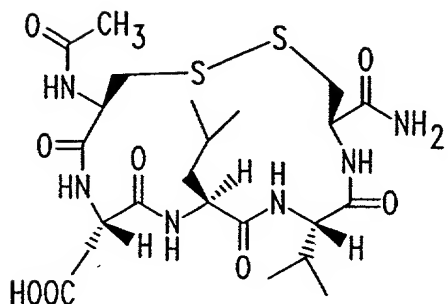
N-Ac-CDENC-NH₂



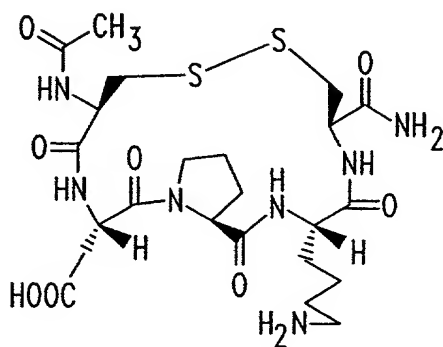
N-Ac-CDETC-NH₂



N-Ac-CDKFC-NH₂

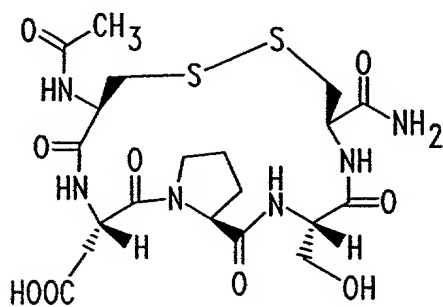


N-Ac-CDLVC-NH₂

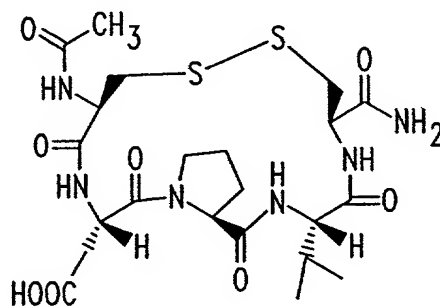


N-Ac-CDPKC-NH₂

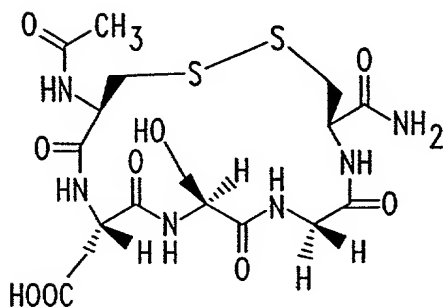
Fig. 7B



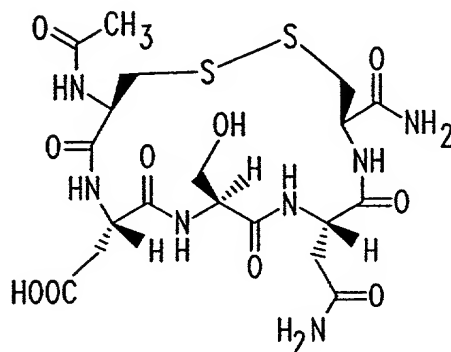
N-Ac-CDPSC-NH₂



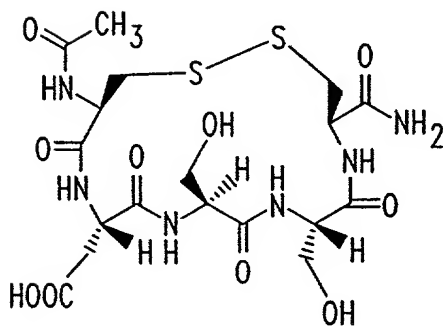
N-Ac-CDPVC-NH₂



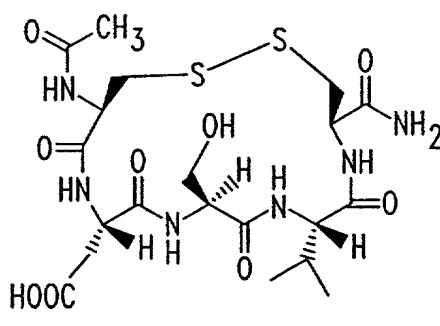
N-Ac-CDSGC-NH₂



N-Ac-CDSNC-NH₂

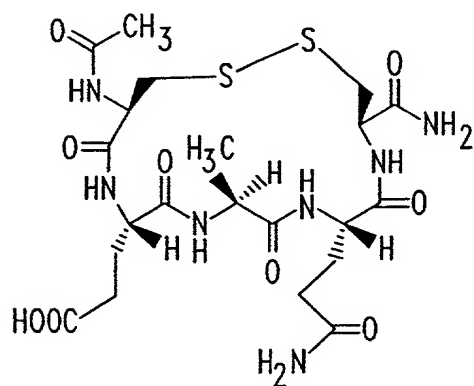


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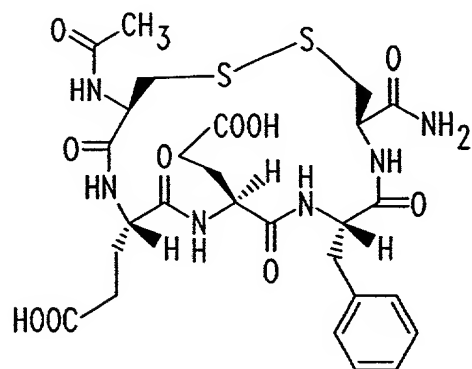


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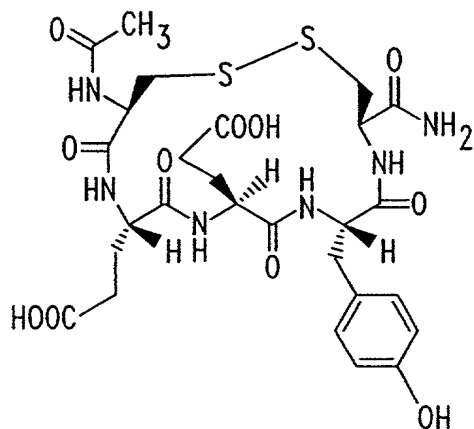
Fig. 7C



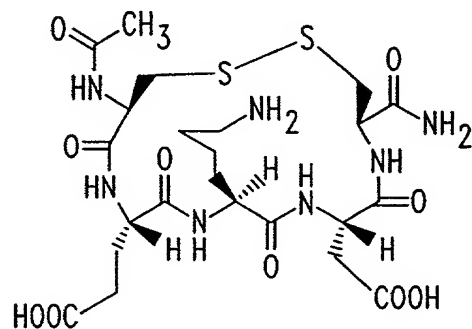
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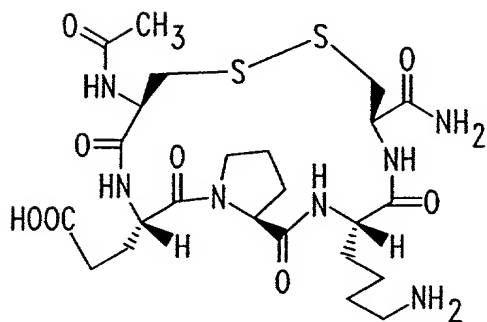
N-Ac-CEEFC-NH₂



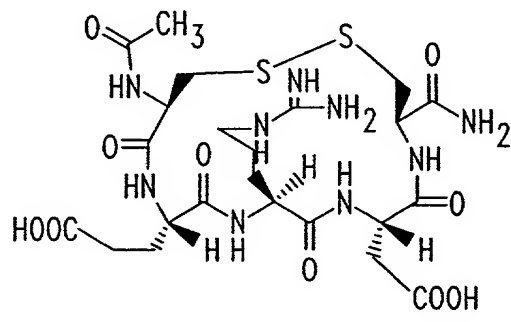
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N-Ac-CEKDC-NH₂

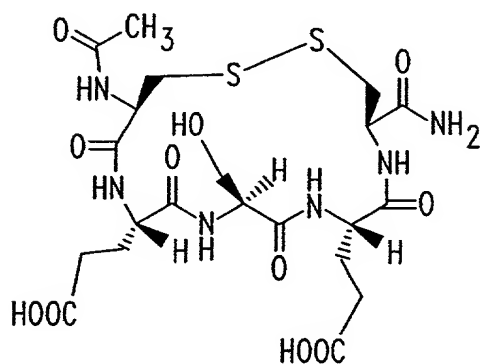


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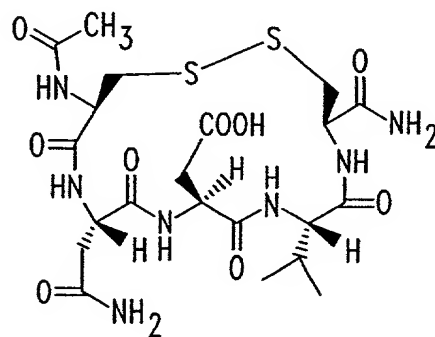


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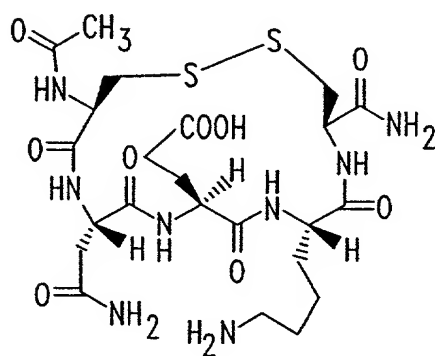
Fig. 7D



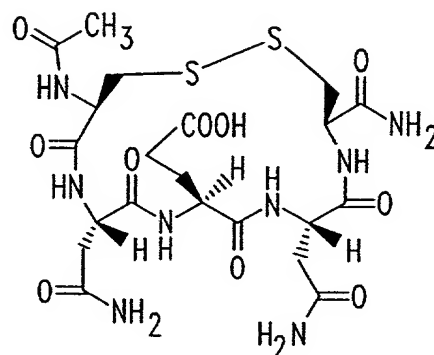
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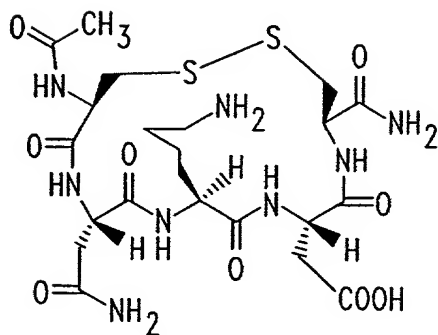
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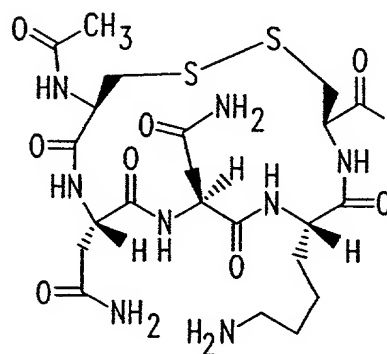
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N-Ac-CNENC-NH₂



N-Ac-CNKDC-NH₂



N-Ac-CNNKC-NH₂

Fig. 7E

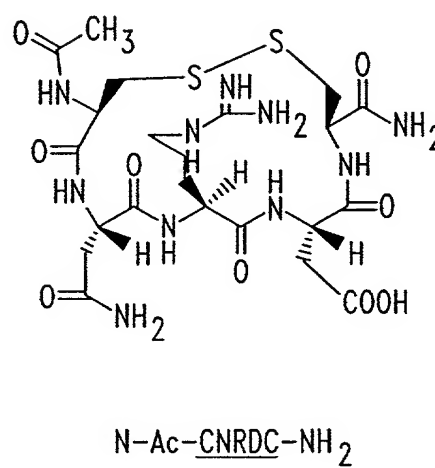
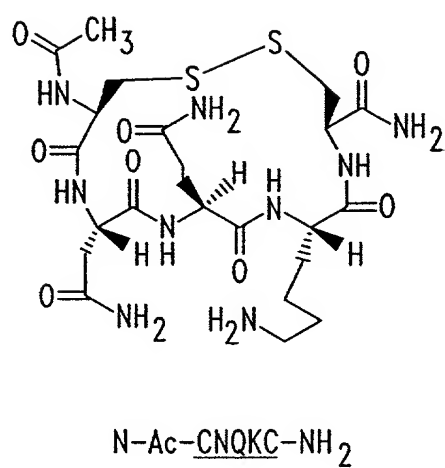


Fig. 7F